

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)
2. (Currently Amended) ~~[[A]]~~The method as claimed in claim 3 ~~[[1]]~~, the method further comprising ~~the step of~~ suppressing the subspace components that comprise narrow-band interference signals from the received signal.
3. (Currently Amended) A method of suppressing narrow-band interference from a wide-band signal, comprising
receiving a signal,
performing an orthonormal conversion of the received signal into subspace components of a desired subspace,
decoding the converted signal with a decoder, whereby an estimate for the received signal is obtained,
determining an estimate for narrow-band interference properties by subtracting the estimate obtained from an output of the decoder from the received signal before performing the orthonormal conversion,
reducing effect of the subspace components comprising narrow-band interference signals reduced in the received signal by means of the determined estimate; and ~~A method as claimed in claim 1, the method further comprising the step of~~
excising the subspace components that are stronger than the a given threshold from the received signal to a desired level to generate an interference suppressed signal.
4. (Currently Amended) ~~[[A]]~~The method as claimed in claim ~~[[1]]~~ 3, the method further comprising ~~the step of~~ passing the interference suppressed signal ~~from which interference is suppressed~~ to the decoder again, and performing the interference cancellation operation so many times as desired.

5. (Currently Amended) ~~[[A]]~~The method as claimed in claim ~~[[1]]~~ 3, the method further comprising ~~the step of~~ passing the interference suppressed signal through the decoder several times before the output value of the decoder is used in the interference cancellation.

6. (Cancelled)

7. (Currently Amended) A receiver comprising interference cancellation means for suppressing a narrow-band interference signal from a received signal,
conversion means for performing an orthonormal conversion of the signal into subspace components of a desired subspace,
a decoder connected operationally to the output of the interference suppression means, in which decoder an estimate for the received signal is obtained, the output of the decoder being operationally connected to the interference suppression means, wherein
the conversion means are arranged to determine an estimate for narrow-band interference properties, in which determination the estimate obtained from the output of the decoder is subtracted from the received signal before the orthonormal conversion is performed, and
by using the determined estimate, the interference cancellation means are arranged to reduce effect of the subspace components comprising narrow-band interference signals in the received signal.~~A receiver as claimed in claim 6, where in~~
wherein the interference cancellation means are arranged to suppress the subspace components comprising narrow-band interference signals from the received signal.

8. (Currently Amended) ~~[[A]]~~The receiver as claimed in claim ~~[[6]]~~ 7, ~~where in~~ wherein the interference cancellation means are arranged to excise the subspace components, which are stronger than the given threshold from the received signal to a desired level.

9. (Currently Amended) A receiver as claimed in claim ~~[[6]]~~ 7, ~~where in~~ wherein the decoder is a turbo-decoder.